March 13, 2007

Joe Bednarz, Jr., Esquire Bednarz and Bednarz Parkway Towers, Suite 1400 404 James Robertson Parkway Nashville, Tennessee 37219

Re: Lee v. Taser

Dear Mr. Bednarz,

The following report is preliminary and based on information available to date. The issues described below are subject to change as additional information becomes available.

Product safety management is a system that a reasonably prudent manufacturer puts in place <u>before</u> the first product is conceived to ensure that the final product, along with its warnings, packaging and marketing materials, is reasonably safe. It starts with a statement of commitment for product safety from top management and develops a company's procedures to <u>identify hazards</u>, assess the risk, apply adequate <u>safety measures</u> to <u>eliminate hazards</u> from the design, places a <u>guard between users and potential injury</u> and to <u>warn users of all hazards</u> that have not been eliminated or adequately guarded through technically feasible and economically practical safety measures.

To ensure that product safety management programs are in place, a product safety audit as outlined by the National Safety Council can be used to test the validity of the company's program and to identify the objective techniques to be

applied. Once established, ensuring that the required elements are incorporated in the plan is generally not prone to error. Although the application of documents and data may be subject to discussion, the actual principles are well established in the literature.

Product safety management theory has been published and reviewed by scholars in the field for over 50 years. As can be shown from the wide dissemination and acceptance by academia, business and legal professionals, their concepts are widely used and accepted throughout the safety community.

Safety management is primarily a tool to protect consumers before they purchase products. When used correctly, these principles are a reasonable model for injury prevention. It is only after an injury that they are applied to determine if the managers failed to apply the accepted principles.

When evaluating product safety, it is incumbent upon a reasonably prudent manufacturer, distributor, and retailer to apply the following accepted principles of safety analysis to insure that the products are reasonably safe.

- 1. <u>Establish and observe a written safety policy</u>. This policy should emphasize commitment to safety. In writing, it will insure all employees obtain clear guidance on safety issues. The policy should set forth a method for discussing safety responsibilities.
- 2. Adequately identify and evaluate product hazards. A hazard is the inherent capability of a product to do harm. Manufacturers, distributors, and retailers must review the potential injury-causing energy and evaluate severity and foreseeability.
- 3. Perform an adequate design review integrating product hazards, the environment, and foreseeable consumer use. Once hazards are identified, the reasonably prudent manufacturer/distributor/retailer must consider the conditions of use under which the injury-causing mechanism (hazard) can cause harm to the user.

Analysis of the environment where the product will foreseeably be used, especially in light of product promotion, is critical in discerning how the consumer may foreseeably use the product, even if it is not the use intended by the manufacturer.

The product must be reasonably safe prior to distribution in commerce. If it is not possible to eliminate the hazard, the reasonably prudent manufacturer, distributor, and retailer must take steps to guard against the hazard, to adequately inform users of the danger inherent in the product, and to motivate them to avoid that danger.

- 4. Monitor the safety performance of the product after sale and use, and take corrective action where necessary. Once products are distributed to consumers, a responsible manufacturer/distributor/retailer must determine where injuries can occur, or if a product defect (including lack of adequate labeling and safety information) could create injuries. Where corrective action is needed to substantially reduce or eliminate injuries, consumer notification and additional corrective measures must be implemented to insure consumer safety.
- 5. <u>Develop adequate warnings and training to motivate consumers to understand and avoid dangers</u>. This is critical and relatively inexpensive. When consumers have sufficient data to make an informed decision about safety, they are in a better position to address safety issues.

\* \* \* \* \*

A key precept of safety management concerns products with inherent capability to do catastrophic harm. In priority order, the duty of a reasonably prudent manufacturer is to eliminate the hazard, or, if this is not possible while preserving utility, guard against the hazard. At a minimum, the manufacturer must properly inform users of the danger inherent in the product and motivate them to avoid injury.

The first concept is the safety engineering hierarchy of priorities:

- Eliminate hazards
- When hazards cannot be eliminated, provide feasible safeguards against them
- Provide warnings and personal protective equipment against remaining hazards

# National Safety Council Product Safety Management Guidelines, 1989

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In 1931, H. W. Heinrich, Assistant Superintendent for the Engineering and Inspection Division of the Travelers Insurance Company published the primary modern text of Safety Management, *Industrial Accident Prevention*, A Scientific Approach. The results of his in-depth analysis of more than 5000 accidents revealed four fundamental principles of scientific accident prevention:

- 1. Executive interest and support
- 2. Cause-analysis
- 3. Selection and application of remedy
- 4. Executive enforcement of corrective practice

These concepts, developed by Heinrich for the Joliet Steel Works, have evolved into modern day safety management practices. Scholarly research has further developed the foundation for safety management practices.

The Consumer Product Safety Commission incorporated these principles in its 1975 publication, *Handbook and Standard for Manufacturing Safer Consumer Products*. The Commission addressed executive action, design review, distribution and corrective action.

In 1983, Harold Roland of the University of Southern California Institute of Safety and Systems Management and Brian Moriarty authored *System Safety Engineering and Management*, outlining the need for product safety policy and analysis to prevent injuries. They evaluated hazard identification, severity and a systematic approach to identify defects.

The National Safety Council first published *Product Safety Management Guidelines* in 1989 describing the relationship between marketing, manufacturing, and safety communications as a key to corporate accident prevention. Their analysis includes the hierarchy of safety management and prevention programs to substantially reduce or eliminate injuries.

ANSI and the American Institutes for Research have published guidelines for user information and document production.

Over the past 20 years, I have published articles and book chapters outlining the principles of safety management and analysis in many forums, lectured at the National Safety Council on injury prevention and warnings, and have assisted major manufacturers, distributors and retailers on safety management issues and recalls. While many scholars bring their individual perspective to this issue, the seminal principles that create the model for product safety management have been well established and widely accepted in business, government and academic institutions for over 50 years.

\* \* \* \* \*

On September 22, 2005, Patrick Lee, 21, was attending a concert on Cannery Row in Nashville. Asked to leave after getting too close to the stage, Mr. Lee was confronted by police officers. He was sprayed at least twice with pepper spray (oleoresin capsium). When inhaled, this spray can swell the lining of the throat, restrict breathing and cause uncontrollable choking. When the spray is coupled with a "high-exertion activity" it can result in death. He was then shocked with a Taser nineteen times. Taser shocks, which are electro-muscular disruptors can, at a minimum, result in over-exertion, exhaustion and athletic type injury. Multiple and continued exposures create a substantially higher level of danger, and Taser training and warnings were inadequate to substantially reduce or eliminate serious injury or death.

There is much documentation on these issues that has not yet been provided, and therefore firm opinions can not be formalized. However, based on the information available at this time and subject to review as additional information is provided, it is my opinion that:

1. Taser International failed to follow the accepted principles of safety analysis to adequately develop training materials for Police Academies and warn officers of the dangers of serious injury or death associated with foreseeable use of the Taser. Taser International failed to adequately:

- a) Establish and observe a written corporate safety policy
- b) Identify product hazards and evaluate severity
- c) Perform a risk assessment to adequately integrate product hazards, the environment and foreseeable consumer use
- d) Monitor the safety performance of their product
- e) Take adequate corrective actions to eliminate, guard or warn consumers of the danger and motivate them to avoid injury
- 2. Taser International failed to adequately warn and train Police Departments and police officers of the potential for catastrophic injury or death to suspects from multiple or prolonged Taser shocks. Taser had access to substantial research raising serious concerns about cardiorespiratory dangers.
- 3. In light of over 100,000 Taser stun guns sold to consumers since 1994, and new model currently on the market, Taser International has a responsibility to provide consumers research to understand the effect of Taser use. Failure to warn consumers of such dangers can create a substantial product hazard.
- 4. Taser International has a responsibility to notify the Consumer Product Safety Commission if the Taser "contains a defect which could create a substantial product hazard" or "creates an unreasonable risk of serious injury or death."

In the deposition of Rick Smith, President of Taser International, Mr. Smith claims that the company identified potential hazards, assessed the risks and implemented adequate training and warnings to address potential injuries received from application of the Taser. Yet as described below, their training materials failed to identify known hazards, made claims about safety that have been at least seriously questioned by others, and failed to clearly incorporate information in warnings and bulletins to officers about those dangers to countermand prior training on safe usage.

The Metro Nashville Police Department officers who responded to the call concerning Patrick Lee were trained under Taser Student Guide Version X dated November 4, 2004. The Guide states:

## **Trigger Operation**

- Single trigger pull Fires current for 5 seconds
- Trigger pulls during the 5-second cycle will not affect the cycle unless held continuously
- Holding the trigger continuously beyond the 5second cycle will continue the electrical cycle until trigger is released. (The cycle will cease immediately once the trigger is let go in this case.)

# Follow Up Action

 TASER user should anticipate holding the trigger down while the suspect is restrained

The Certification Lesson Plan includes:

## What TASERs Might Do

- Might cause slight signature marks that resemble surface burns--appear red or may blister
- Can cause eye injury if shot too high
- Causes muscle contractions
- Can cause secondary injuries from person falling
   --(possible issue for pregnant women)

## What Can Go Wrong?

- Clothing over 2.25" thick or clothing that falls away from the body like an open jacket
- Single Dart Hit and missed shots
- Low Batteries (cold or undercharged)
- Operator Error
- Low Nerve / Muscle Mass
- Cartridge Failure / Weapon Malfunction
- Suspect's reaction / officer anticipation
   --Suspect "frozen" or propped up: appears unaffected
- Wires break
- A battery put in wrong position
- Aiming angle suspect's position
- Zipper shot
- Doors closing on wires when suspects are behind door

# Follow Up Action

 TASER user should anticipate holding the trigger down while the suspect is restrained
 Typically, the 1st cycle changes behavior, the 2nd allows for apprehension

The Taser International Student Guide training fails to instruct officers to use restraint and avoid known dangers due to prolonged, repeated and continuous exposures as identified in available research.

Seven months after receiving the hands-on Taser training, additional written material was sent to the Metro Nashville Police Department.

On June 28, 2005, just 3 months before the death of Patrick Lee, Taser International issued Training Bulletin 12.0-04, admitting, for the first time, that

- 2. Repeated, prolonged, and/or continuous exposure(s) to the TASER electrical discharge may cause strong muscle contractions that may impair breathing and respiration, particularly when the probes are placed across the chest or diaphragm. Users should avoid prolonged, extended, uninterrupted discharges or extensive multiple discharges whenever practicable in order to minimize the potential for over-exertion of the subject or potential impairment of full ability to breathe over a protracted time period.
- 3. Particularly when dealing with persons showing symptoms of excited delirium, use of the TASER system should be combined with physical restraint techniques to minimize the total duration of the struggle and minimize the total duration of TASER system stimulation. Excited delirium is a potentially fatal condition caused by a complex set of physiological conditions including over-exertion of the subject and inability for sufficient respiration to maintain normal blood chemistry. These subjects are at significant and potentially fatal health risks from further prolonged exertion and/or impaired breathing.

While the Bulletin addresses the content of the continuing scientific data available concerning the dangers of Taser use, particularly multiple applications or prolonged exposure, neither the email transmittal delivery or the densely typed format can effectively override the direct training provided officers in the classroom setting. In fact, Captain Michael Hagar, the director of the Police Academy, states in his deposition that holding down the trigger causing continuous shocks can still be an appropriate use of force. Even though he states that he reviewed the June 2005 Bulletin, he is not familiar with wording that holding the trigger could result in death. He states that while some of the language in Bulletin 12.0-04 is new, it is no different than discussed in the original Version X training. He states that Officers Mays and Scruggs received the Bulletin by email. Officer Mays does not recall the Bulletin. Captain Hagar could not seem to distinguish the new material on safety from his original training. The Bulletin apparently had little effect on the Police Academy director and his understanding of appropriate use.

It is not surprising that Mike Hagar and the officers have little recollection of the June 28 Bulletin. Five weeks later, on August 6, in an email entitled Taser Training Bulletin Response, Rick and Tom Smith appear to retract the warning of the risks of multiple shocks in the 12.0-04 Bulletin. Comparing the danger to sitting in a sauna too long, they advise "Don't sit in a sauna for two hours without water, and don't deploy a Taser device for 10 minutes continuously without a darn good reason." They complain that the media mischaracterized the earlier "common sense warnings" with claims that Taser "backtracked about effect of multiple shocks." Failure to reinforce the critical safety warnings and in fact contradicting the content negates the educational impact of the original training message.

On August 26, 2005, in the next in a series of contradicting communications, Bob Allen sent an email to the force stating that each 5 second trigger pull and shock is considered as a separate use of force and that continuous holding the trigger could cause death.

On September 22, Patrick Lee was pepper sprayed twice and tasered 19 times. He died soon afterward.

Six days after the death of Patrick Lee, Taser International issued "Product Warnings--Law Enforcement." For the first time, the information included an ANSI Z535 derived graphic presentation of the warning. The language of the text is clearly less specific in its warning than the June 28 Bulletin, but does include the potential for injury, a departure from previous training.

Research available to Taser International prior to the death of Patrick Lee clearly calls into question the certainty with which Taser, to this day, seems to promote the appropriate use of multiple, prolonged and continuous applications.

# British Columbia Office / Victoria Police Department

Office of the Police Complaint Commissioner
Taser Technology Review Final Report
OPCC File No. 2474
June 14, 2005

#### EXECUTIVE SUMMARY

Research done by the Air Force Research Laboratory (AFRL) confirmed several of the hypotheses present in our Interim Report, as it demonstrated that very length TASER exposures (three minutes of five second on - five second off cycling) had significant impacts on blood levels of carbon dioxide, lactate, pH, and other markers. We believe this study provides support for the proposition that police should, where possible, be minimizing multiple TASER applications.

The effect that TASER application has on respiration remains an area of concern. Muscular tetany that impairs respiration may be an operative factor that has been previously unrecognized. This concern also relates to the issue of multiple usages.

### STUDIES & REPORTS

Air Force Research Laboratory Study

In this case, these animals were exposed to repeated cycles from an X26 TASER using five seconds of

application followed by five seconds of rest for a period of three minutes. This meant the animals were TASERed 18 times within that three minute period. After a delay of one hour, a second three minute exposure period, identical to the first, was added.

Dr. Jauchem made a number of observations relating to blood chemistry. With respect to pH, he noted that blood became more acidic after the three minute application, returning toward normal levels one hour after exposure.

# RECENTLY IDENTIFIED MEDICAL CONTRA-INDICATORS

Respiratory Impairment / pH Changes in Multiple Applications

Based on Dr. Jauchem's research, it would appear that prolonged TASER applications (three minutes of five seconds on - five seconds off cycling) can produce significant lowering of pH levels in pigs. This may be the interaction of respiratory interruption along with high levels of muscular contraction.

In case studies, the investigative team has observed instances where TASERs were used multiple times; sometimes against individuals who were already secured. We note that Al has called for controls on multiple applications including:

- "8. Repeated shocks should be avoided unless absolutely necessary to avoid serious injury or death
- 9. Departments should introduce guidelines which prohibit the application of prolonged shocks beyond the five second discharge cycle."

There will be situations, particularly in areas where backup officers may be distant or unavailable, where multiple applications are necessary to control violent subjects. Training protocols, however, should reflect that multiple applications, particularly continuous cycling of the TASER for period exceeding 15-20 seconds, may increase the risk to the subject and should be avoided where practical. Conventional use-of-force theory dictates that officers abandon any particular tactic after it has been employed several times without achieving the desired result (i.e.: control of the subject). If multiple TASER applications have not succeeded in gaining control, the officer should reassess and consider another force option or disengagement.

# Canadian Police Research Centre Technical Report

TR-01-2006

Review of Conducted Energy Devices August 22, 2005

Prepared for the Canadian Association of Chiefs of Police

## **Executive Summary**

As a result of a number of deaths associated with the use of Conductive Energy Devices (CEDs), and growing concern within the public and the law enforcement communities in Canada, the Canadian Association of Chiefs of Police (CACP) approached the Canadian Police Research Centre (CPRC) in August 2004, to conduct a comprehensive review of the existing scientific research and data and provide a national perspective on the safety and use of CEDs.

### Conclusions

This report summarizes the efforts of the CPRC team in researching, analyzing, and communicating the vast array of complex issues associated with CEDs. The CPRC team believes that the following global statements will assist and guide the policing community in Canada establishing best practices for the safe use of CEDs:

- Definitive research or evidence does not exist that implicates a causal relationship between the use of CEDs and death.
- Existing studies indicate that the risk of cardiac harm to subjects from a CED is very low.
- Police officers need to be aware of the adverse effects of multiple, consecutive CED cycles

 The issue related to multiple CED applications and its impact on respiration, pH levels, and other associated physical effects, offers a plausible theory on the possible connection between deaths, CED use, and people exhibiting the symptoms of ED.

# The Joint Non-Lethal Weapons Human Effects Center of Excellence

Part II -- Appendices
1 March 2005

Appendices (Part II) to the Taser Study characterized the Taser International Database as:

- Records not collected in a statistically representative survey
- Records potentially influenced by a number of sources of bias
- Known to be censored
- Not clear that Taser International verifies the reports
- The Taser International data are messy
- Data that are not internally consistent
- Therefore it is difficult to rely on the data to draw definitive conclusions about the incidents.

Since September 22, 2005, and up to the present, Taser International website continues to promote the use of multiple applications. Bulletin 12.0-04 has apparently not been included on the site. Future training is described as follows:

This instructor course will demonstrate that the primary causes of death in almost 100 percent of these events are illegal drugs, pre-existing medical conditions, and/or other related issues and not the improper use-of-force or the misuse of restraint or other defensive tools or tactics used by those attempting to restrain individuals.

Yet, additional research since the death of Mr. Lee has continued to raise serious concerns.

# American College of Emergency Physicians

Cardiovascular Risk and the TASER®: A Review of the Recent Literature

Matthew D. Sztajnkrycer, MD, PhD Department of Emergency Medicine Mayo Clinic, Rochester, MN

Although credited with saving hundreds to thousands of lives, controversy exists regarding an increasing number of deaths temporally associated with TASER® use. Investigative reports have uncovered undisclosed relationships between TASER International and purportedly independent studies on the safety of the TASER®, raising questions of bias. In this climate of uncertain risk, law enforcement and the public at large are left with many unanswered questions regarding the safety of the TASER®.

### Conclusions

Until more studies can be performed specifically addressing these questions, the following recommendations appear reasonable:

- 1. First and foremost, law enforcement and EMS personnel should be trained in the recognition and management of excited delirium.
- 2. Use of multiple TASER® discharges, while not always avoidable, should be minimized wherever possible.
- 3. Use of TASER® against smaller individuals should be undertaken judiciously.

## The Journal of Trauma

Injury, Infection and Critical Care
Acute Effects of TASER X26 Discharges in a
Swine Model.

#### Abstract:

Background: Very little objective laboratory data are available describing the physiologic effects of stun guns or electromuscular incapacitation devices (EIDs). Unfortunately, there have been several hundred incustody deaths, which have been temporally associated with the deployment of these devices. Most of the deaths have been attributed to specific cardiac and metabolic effects. We hypothesized that prolonged EID exposure in a model animal system would induce clinically significant metabolic acidosis and cardiovascular disturbances.

Like much of the conflicting research associated with the prolonged use of Taser applications, the issue to be considered is whether there was sufficient notice of a substantial risk of injury as defined in the June 28th Taser International Training Bulletin 12.0-04 to require its presentation as an integral part of Taser International Training. Conflicting messages, driven with apparent purpose by Taser International appear intended to prevent a full and complete understanding of the substantial injury that can be caused by multiple, prolonged, continuous Taser use.

Under Section 15 of the Consumer Product Safety Act, and the regulations at 16 CFR 1115, manufacturers, distributors and retailers who obtain information that their product either "contains a defect that could create a substantial product hazard" or "creates an unreasonable risk of serious injury or death" must report to the Commission within 24 hours of obtaining that information.

## 16 CFR 1115 12 states:

Subject firms should not delay reporting in order to determine to a certainty the existence of a reportable noncompliance, defect or unreasonable risk. The obligation to report arises upon receipt of information from which one could reasonably conclude the existence

of a reportable noncompliance, defect which could create a substantial product hazard, or unreasonable risk of serious injury or death.

In 1976, Jack Cover, the original inventor of the Taser, and his attorney visited the CPSC to discuss the first generation Taser. In 1985, the CPSC determined that after a change to a non-powder propellant, the Commission would have jurisdiction. Taser International claims on the website that they have sold over 136,000 Tasers to private citizens. New personal models are currently being introduced.

Upon determining the potential for serious injury or death due to foreseeable use of the Taser, and the sale of Tasers directly to non law enforcement personnel, Taser International has a responsibility to notify the CPSC if, among other things, safety related changes to the Tasers or additional warnings are required where such changes indicate that a defect exists which could create a substantial product hazard or an unreasonable risk.

Based on data available on September 22, 2005, Taser International failed to adequately train Metro Nashville Police Department and its officers of the dangers associated with multiple, prolonged and continuing application of the Taser as outlined in Taser International Training Bulletin 12.0-04.

The Taser Student Guide Version X, provided to Metro Nashville Police Department only 7 months before, promoted the very behavior the June Bulletin cautioned against. Subsequent data, including the current website, continue to approve of multiple application.

Emailing such a safety critical type written document will often not be able to override the lessons learned in hands on training. Taser International had an obligation to immediately contact Metro Nashville Police Department and initiate hands on training for all officers concerning multiple, prolonged and continuous use to protect suspects from an unreasonably dangerous condition in many cases.

# I have reviewed the following materials for this report:

Taser Student Guide Version X dated November 4, 2004

The Certification Lesson Plan

Taser International Training Bulletin 12.0-04, June 28, 2005

Taser Training Bulletin Response

Police Department Emails

Letter from Tom Smith, President of Tascr, to Mike Hagar, Nashville Metro Police, August 3, 2005

Taser International Product Warnings--Law Enforcement

British Columbia Office / Victoria Police Department, Office of the Police Complaint Commissioner Taser Technology Review Final Report OPCC File No. 247, June 14, 2005

Canadian Police Research Centre Technical Report, TR-01-2006 Review of Conducted Energy Devices, August 22, 2005 Prepared for the Canadian Association of Chiefs of Police

American College of Emergency Physicians

Cardiovascular Risk and the TASER®: A Review of the Recent Literature Matthew D. Sztajnkrycer, MD, PhD Department of Emergency Medicine Mayo Clinic, Rochester, MN

The Journal of Trauma Injury, Infection and Critical Care
Acute Effects of TASER X26 Discharges in a Swine Model.

Depositions and Exhibits of

Patrick Smith 2 vols. Michael Hagar Paul Trickey Bob Allen Glenn Yates Ronal Serpas

4 CD's containing:

Medicals
Witness Statements
Depositions:
Various Taser Documents

Complaint

Transcript of videotape of Tracy Fitzgerald

Taser Discovery

Taser Website

Consumer Product Safety Act and Regulations at 16 CFR 1115

Wm F. Kitzes has over 30 years of research and experience at the U.S. Consumer Product Safety Commission, the Institute for Safety Analysis and Consumer Safety Associates, where he currently serves as Principal Safety Analyst and Product Safety Manager. Mr. Kitzes is a Board Certified Product Safety Manager and Hazard Control Manager, and holds a Certificate in Safety Management from the American Society of Safety Engineers. He has testified in over 100 trials in 28 states, Canada and Australia.

From 1974 to 1981, Mr. Kitzes worked at the U.S. Consumer Product Safety Commission (CPSC). For 3 years, he served as Legal Advisor to the Director, Office of Product Defect Identification, and was responsible for identifying product defects, implementing recalls and developing voluntary corrective action plans under Section 15 of the Consumer Product Safety Act.

As CPSC Program Manager for Sports, Recreation and Power Equipment (1977-1980), Mr. Kitzes was certified by the U. S. Government's Safety Management / Engineering Series (GS-018/803). He supervised a team of engineers, epidemiologists, human factors specialists, and technical communication staff in the evaluation of injury statistics, engineering data, and product use information to achieve a reduction in consumer products injuries. Injury prevention tools combined mandatory and voluntary standards, on-product warnings, and safety education campaigns; resulting in publication of the Federal Safety Standard for Walk-Behind Power Lawn Mowers 16 CFR 1205 (1979). Mr. Kitzes served as Commission representative to various industry groups and standards development committees, including American National Standards Institute (ANSI), American Society for Testing & Materials (ASTM), the Outdoor Power Equipment Institute and the Sporting Goods Manufacturers Association.

Mr. Kitzes has been retained as a consultant for a number of major manufacturers, including the <u>Toro Company</u> on product safety issues, the <u>Vendo Company</u> for developing warning labels and safety bulletins, the <u>Jensen Corporation</u> for safe operation of industrial equipment, <u>Nobel Chemical Co.</u> for adequacy of warnings and <u>Corning Glass</u> for evaluation of recalls, <u>BernzOmatic</u>, a division of the <u>Newell Group</u>, for development of point-of-purchase recall displays and advertising, <u>Arctic Cat. Inc.</u> for analysis of all-terrain vehicle off-road safety, including instructions, warnings and foreseeable use, and <u>Visioneer, Inc.</u> in developing a program to upgrade computer

scanners. He has developed a program for Global Industries to improve executive chair stability, reviewed warnings on heavy equipment for Daewoo Heavy Industries America, investigated safety issues for Carson Industries, Inc. and assisted CISCO Systems in recall development. Bill has designed a warning label for Whisper Communications, Inc., and assisted Wham-O, Inc. in recall procedures. He has provided risk analysis, recall assistance and consumer warnings and instructions to Restoration Hardware, Inc. and has developed warnings for Plastics Research Corp. concerning use of decorative building materials as protective barriers. He has reviewed advertising and promotional material for ACH Foods and assisted Hilton Hotels on recall issues. Bill has advised Swimways Corporation on product safety management and warnings.

Mr. Kitzes has served as an advisor to the National Association of Attorneys General, the State of New York. He is the former Chairman of the Florida Consumers' Council (1993-2007). He is the author of numerous articles in professional journals, including: Standards, Regulations and Safety Guidelines to Protect Children from Injury, Children and Injuries, 2001; Risk Analysis in Product Liability Litigation, 2000 Wiley Expert Witness Update; Protecting Our Kids - Everyone Plays a Part, Forum, Consumer Attorneys of California, December 1997; Forensic Safety Analysis: Investigation and Evaluation, 1996 Wiley Expert Witness Update; The Role of the Safety Analyst in Product Liability Litigation, Trial Diplomacy Journal, March/April 1995; Safety Management and the Consumer Product Safety Commission, Professional Safety, American Society of Safety Engineers, April 1991; and ATVs -- The Hidden Danger, Journal of Law, Medicine & Health Care, Spring 1989.

Mr. Kitzes has been an active speaker at the National Safety Council and the International Consumer Product Health and Safety Organization. He wrote a column on product safety for CCH Consumer Product Safety Guide, 2000-2001.

See attached Curriculum Vitae for additional information. Compensation for research and analysis is \$1950 per 8 hour day. Fees for deposition and trial are \$2950 per day.